

CLAIMS

1. A method of encapsulating flavor comprising:
 - a) providing a flavor;
 - b) providing encapsulating ingredients comprising acacia gum, corn syrup solids having a DE of between about 24 and about 44, and gelatin; and
 - c) encapsulating the flavor with a matrix comprising about% to about 60% acacia gum, about 30% to about 60% of said corn syrup solids and about 2% to about 20% gelatin to form an encapsulated flavor material.
2. The method of claim 1 wherein the flavor comprises about 5% to about 25% of the total encapsulated flavor material.
3. The method of claim 1 wherein the acacia gum comprises gum arabic.
4. The method of claim 1 wherein the acacia gum is a spray dried acacia gum derived from *Acacia senegal*.
5. The method of claim 1 wherein the gelatin comprises fish gelatin.
6. The method of claim 1 wherein the encapsulated flavor material comprises about 15% to about 20% flavor, about 30% to about 40% gum arabic, about 30% to about 40% of said corn syrup solids and about 2% to about 8% gelatin.
7. The method of claim 1 wherein the matrix is formed by a spray drying process.
8. The method of claim 7 wherein the encapsulating ingredients and flavor are dispersed in water and the mixture of water, encapsulating ingredients and flavor are fed into a spray dryer.

9. The method of claim 8 wherein the mixture of water, encapsulation ingredients and flavor are spray dried at an inlet temperature of between about 180°C and about 205°C.

10. The method of claim 9 wherein the inlet temperature is between about 190°C and about 200°C.

11. The method of claim 8 wherein the mixture comprises about 0% to about 60% water, about 32% to about 40% encapsulating ingredients and about 5% to about 12% flavor prior to being spray dried.

12. The method of claim 1 wherein the flavor comprises one or more flavor components.

13. The method of claim 12 wherein the one or more flavor components comprises a blend of volatile and non-volatile flavor components.

14. The method of claim 1 wherein the boiling point of the flavor is less than about 160°C.

15. The method of claim 12 wherein the flavor comprises one or more fruit esters.

16. An encapsulated flavor material comprising:

a) about 5% to about 25% flavor; and

b) a matrix encapsulating the flavor, the matrix comprising

i) about 30% to about 60% acacia gum,

ii) about 30% to about 60% corn syrup solids having

a DE of between about 24 and about 44, and

iii) about 2% to about 20% gelatin;

c) wherein the matrix comprises at least 80% acacia gum

and corn syrup solids on a combined basis.

17. The encapsulated flavor material of claim 16 wherein the matrix comprises about 40% to about 50% acacia gum.

18. The encapsulated flavor material of claim 16 wherein the matrix comprises about 40% to about 50% of said corn syrup solids.

19. The encapsulated flavor material of claim 16 wherein the matrix comprises about 2% to about 10% gelatin.

5 20. The encapsulated flavor material of claim 16 wherein the encapsulated material comprises about 5% to about 25%^{1a} flavor, about 24% to about 48% acacia gum, about 24% to about 48% of said corn syrup solids and about 2% to about 10% gelatin.

10 21. The encapsulated flavor material of claim 16 wherein the encapsulated material comprises about 15% to about 20% flavor, about 30% to about 40% acacia gum, about 30% to about 40% of said corn syrup solids and about 2% to about 8% gelatin.

22. The encapsulated flavor material of claim 16 wherein the matrix is formed by a spray drying process.

15 23. The encapsulated flavor material of claim 16 wherein the flavor comprises one or more of the components selected from the group consisting of ethyl butyrate, isoamyl acetate, ethyl propionate, ethyl acetate, ethyl caproate, and amyl acetate.

20 24. The encapsulated flavor material of claim 16 wherein the acacia gum comprises gum arabic.

25. The encapsulated flavor material of claim 16 wherein the gelatin comprises fish gelatin.

26. A method of making a chewing gum product comprising the steps of:

- 25 a) encapsulating a flavor in a matrix comprising
 i) about 30% to about 60% acacia gum,

ii) about 30% to about 60% corn syrup solids having a DE of between about 24, and about 44, and

iii) about 2% to about 20% gelatin,

the matrix comprising at least 80% acacia gum and corn syrup solids on a combined basis;

b) mixing the encapsulated flavor with gum base and one or more bulking and sweetening agents to form a chewing gum composition; and

c) forming the chewing gum composition into a chewing gum product.

27. The method of claim 26 wherein the composition is formed into chewing gum sticks.

28. The method of claim 27 wherein the flavor comprises one or more flavor components having a boiling point below about 160°C and a flash point below about 120°F.

29. The method of claim 26 wherein the corn syrup solids have a DE of between about 30 and about 44.

30. The method of claim 26 wherein the corn syrup solids have a DE of between about 36 and about 44.

31. The method of claim 26 wherein the matrix is formed by spray drying.

32. A chewing gum composition comprising:

a) about 5% to about 95% gum base;

b) about 5% to about 95% bulking and sweetening agents;

and

c) about 0.1% to about 15% flavor, wherein at least part of the flavor comprises a flavor encapsulated in a matrix comprising

i) about 30% to about 60% acacia gum,

ii) about 30% to about 60% corn syrup solids having
a DE of between about 24 and about 44, and

iii) about 2°/G to about 20% gelatin,

the matrix comprising at least 80% acacia gum and corn syrup

5 solids on a combined basis.

33. The chewing gum composition of claim 32 wherein the flavor in
the encapsulated flavor comprises about 0.1% to about 10% of the chewing
gum composition.

10 34. The chewing gum composition of claim 32 wherein the acacia
gum comprises gum arabic and the corn syrup solids have a DE of about 44.

35. The chewing gum composition of claim 32 wherein the ratio of
acacia gum to corn syrup solids is between about 2:1 and about 1:2, and the
ratio of gelatin to the total of acacia gum and corn syrup solids is between
about 5:1 and about 40:1.

15 36. The chewing gum composition of claim 32 wherein the matrix
has a ratio of acacia gum:corn syrup solids:gelatin of about 1:1:0.1.

37. The chewing gum composition of claim 32 wherein the ratio of
flavor:matrix is between about 1:4 and about 1:20.